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Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com  
(8.7.5/AUX-3.1.1) with SMTP id WAA21678; Sun, 5 May 1996 22:26:24 -0500 (CDT)  
Date: Sun, 5 May 1996 22:26:24 -0500 (CDT)  
Message-Id: <199605060326.WAA21678@uro.theporch.com>  
Errors-To: ws4s@midtenn.net  
Reply-To: glowbugs@theporch.com  
Originator: glowbugs@theporch.com  
Sender: glowbugs@theporch.com  
Precedence: bulk  
From: glowbugs@theporch.com  
To: Multiple recipients of list <glowbugs@theporch.com>  
Subject: GLOWBUGS digest 179  
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas  
X-Comment: Please send list server requests to listproc@theporch.com  
Status: 0

#### GLOWBUGS Digest 179

Topics covered in this issue include:

- 1) Single tube superhet..... list of possibilities  
by Dexter McNeil <dexter@panix.com>
- 2) subscribe to glowbugs  
by toyboat@freenet.edmonton.ab.ca
- 3) Audio Frequency Choke Details  
by "James P. Rybak" <jrybak@mesa5.Mesa.Colorado.EDU>

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Date: Sun, 5 May 1996 04:24:57 -0400 (EDT)  
From: Dexter McNeil <dexter@panix.com>  
To: glowbugs@theporch.com  
Subject: Single tube superhet..... list of possibilities  
Message-ID: <199605050824.EAA05395@panix2.panix.com>

In the interest of "helping" the potential net project of a single tube superhet receiver along, I skimmed through a tube data book over a couple pints of Guinness, and listed what I found. I still have to check a latter GE book that I have, but this should be a start. AES has reprints of the GE Essential Characteristics book which should have these along with some others listed (I haven't checked mine yet).

Jeff, while I think that we could get real clever with the circuit (IF amp doubles as first audio for example), would it be stretching it too much to use two tubes? You could build a killer receiver with two tubes off this list.

Hope this helps!

Regards,  
Dexter McNeil  
dexter@panix.com

Compactrons as listed in RCA RC-25 Receiving tube manual,  
with a Copyright date of 1966.

(Note: all of these are the 6.3v fil versions. Some are available with other voltage filaments for use in series heater strings)

Number	Description
6AC10	High-Mu triode
6AD10	Beam power tube/sharp cutoff pentode (all elements out on separate pins)
6AF11	Dual triode/sharp cutoff pentode (G3 tied to cathode internally)
6AG11	Twin diode/Twin triode
6AL11	Beam power tube/sharp cutoff pentode (G3 tied to cathode on beam power section)
6B10	Twin diode/medium-mu triode
6BA11	Triode/twin pentode (pentode sections share cathode, G1 and G2, with separate G3s and plates)
6BD11	Dual triode/sharp cutoff pentode (G3 tied to cathode internally)
6BF11	Beam power tube/sharp cutoff pentode (G3 tied to cathode internally on beam power section)
6BH11	Medium-mu twin triode/sharp cutoff pentode (G3 tied to cathode internally on pentode section)
6C10	High-mu triode (mu of 100)
6D10	High-mu triode (mu of 57) (same pinout as 6C10)
6FJ7	Medium-mu dual triode (one section capable of 10 watts plate dissipation!)
6FM7	Dual triode (see above note, different specs, though)
6FY7	Dual triode (higher voltage, one section good for 7 watts plate dissipation)
6J10	Pentode/beam power tube (all elements brought out individually on both sections)
6J11	Sharp cutoff twin pentode (all elements brought out individually on both sections)
6K11/6Q11	Three unit triode (unit #1 different from 2 & 3)

6LU10 Medium-mu triode/beam power tube (G3 tied to cathode internally)  
6M11 High-mu twin triode/sharp cutoff pentode (G3 tied to cathode internally)  
6T9 High-mu triode/pentode (G3 tied to cathode internally)  
6T10 Beam power tube/sharp cutoff pentode (G3 tied to cathode on beam power section, internally)  
6U10 Three unit triode (section 2 different from 1 & 3)

Other filament voltage compactrons:

8BM11 Dual pentode (all elements brought out separately)  
8BQ11 Semi remote cutoff dual pentode (all elements brought out separately)  
8BU11 Medium-mu twin triode/sharp cutoff pentode (G3 tied to cathode internally)  
9BJ11 Beam power tube/sharp cutoff pentode (all elements brought out separately)  
13V10 Beam power tube/sharp cutoff pentode (all elements brought out separately)  
14BL11 Dual triode/sharp cutoff pentode (G3 tied to cathode)  
14BR11 Dual triode/sharp cutoff pentode (G3 tied to cathode)  
17X10 Pentode/beam power tube (all elements brought out separately)  
23Z9 Dual triode/beam power tube (common cathode for all sections!)

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Date: Sun, 5 May 1996 11:50:30 -0600 (MDT)  
From: toyboat@freenet.edmonton.ab.ca  
To: glowbugs@theporch.com  
Subject: subscribe to glowbugs  
Message-ID: <Pine.A32.3.91.960505114856.31633B-100000@freenet.edmonton.ab.ca>

Please subscribe me to "glowbugs".

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Date: Sun, 5 May 1996 20:03:35 -0600 (MDT)  
From: "James P. Rybak" <jrybak@mesa5.Mesa.Colorado.EDU>  
To: Glowbugs <glowbugs@theporch.com>  
Cc: j-rybak@usa.net  
Subject: Audio Frequency Choke Details  
Message-ID: <Pine.SV4.3.91.960505194928.7451A-100000@mesa5.mesa.colorado.edu>

Many of the old regenerative receivers in the ARRL Handbook as well as some commercial units like the National SW-3 used a very large value (approx. 500 H.) inductor in the coupling network to the audio stage.

Why was this type of coupling used in the 1930's and early 1940's but later was dropped? I want to build such a receiver. What are the best ways to create such a large value inductor today? I've heard about connecting two or more windings on an audio transformer in series but I'm not sure what kind of transformer is best to start with. Also, how do you measure such a large value of inductance with any kind of reasonable accuracy? My LCR meter only measures up to 20 H. Should I just forget about this kind of coupling and use capacitive coupling instead?

I'd appreciate any suggestions people might have.

Thanks.

Jim WOKSD

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End of GLOWBUGS Digest 179  
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